



Percentage Composition: C 52.16%; H 7.88%; N 12.17%; O 27.79%

Use/Importance: Used as a 0.2-5% aq soln. for extraction-photometric detn. of Cu ($\lambda_{\max}$ 450 nm, ϵ 24400, CCl₄), Pd ($\lambda_{\max}$ 400 nm, ϵ 9600, CHCl₃)

Physical Description: Cryst. (EtOAc)

Melting Point: Mp 73°

>>**Derivative:** Dioxime

CAS Registry Number: 2157-56-4

Molecular Formula: C₅H₁₀N₂O₂

Molecular Weight: 130.146

Accurate Mass: 130.074228

Percentage Composition: C 46.14%; H 7.74%; N 21.52%; O 24.59%

Use/Importance: Used as 0.1M aq. soln. in photometric detn. of Cu ($\lambda_{\max}$ 600 nm)

Physical Description: Prisms (Et₂O)

Melting Point: Mp 105°. Mp 151-152°

Solubility: Sol. H₂O, EtOH, Et₂O

>>**Variant:** Enol-form

CAS Registry Number: 1522-20-9

Molecular Formula: C₅H₈O₂

Molecular Weight: 100.117

Accurate Mass: 100.05243

Percentage Composition: C 59.98%; H 8.05%; O 31.96%

Melting Point: Mp -9°

pKa Value: pK_a 9.03

Other Data: Forms salts with many metals. Exhibits intramolecular hydrogen bonding

>>**Derivative:** Ac

CAS Registry Number: 41002-50-0

Molecular Formula: C₇H₁₀O₃

Molecular Weight: 142.154

Accurate Mass: 142.062995

Percentage Composition: C 59.14%; H 7.09%; O 33.76%

Physical Description: Liq.

Boiling Point: Bp₂₀ 95-96°

Rare Chemicals Library: S46267-5

>>**Derivative:** Me ether

Synonym(s): 4-Methoxy-3-penten-2-one, 9CI

CAS Registry Number: 2845-83-2

Molecular Formula: C₆H₁₀O₂

Molecular Weight: 114.144

Accurate Mass: 114.06808

Percentage Composition: C 63.14%; H 8.83%; O 28.03%

Physical Description: Liq.

Boiling Point: Bp₁₀ 58-59°

Other Data: Most preps. give mixt. of (*E*)- and (*Z*)-isomers. (*E*)-isomer has been separately characterised

References: